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EXAMINER
NGUYEN, THU HA T

ART UNIT	PAPER NUMBER
2155	

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/369,776	DOI ET AL.
	Examiner	Art Unit
	Thu Ha T. Nguyen	2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>24 May 2004</u> .

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-15</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-15</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☒ All   b) ☐ Some * c) ☐ None of:

      1. ☒ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1.   Claims 1-15 are presented for examination.

2.   Claims 14-15 are newly added.

3.   This communication is in response to request for continued examination

(RCE) filed on May 24, 2004, claims 1-15 remain pending.

Response to Arguments

4.   Applicant's arguments filed May 24, 2004 have been fully considered but

they are not persuasive because the following reason:

5.   Applicants argue that neither Kondo or Cacerano teach or suggest the

generation and display of service-specific-views of the network. Before addressing the

argument, Examiner submits that "generation and display of service-specific-view" could

be given a broad and reasonable interpretation as users query/request/select to display

a network topology devices, the network management application will

generate/provide/serve the users with the network topology based on the users specific

selected/queried network topology devices. Prior art, Kondo, explicitly teaches the

generation and display of service-specific-views of the network as shown in col. 7 lines

3-23, col. 20 lines 3-59, col. 48 lines 16-22. Figures 1c, 6a-c and col. 7, lines 33-col. 8,

lines 39 shows users query database 300 to display one or more of the selected

service-specific views based on physical and logical network configuration. When user

selects/queries a network device in network topology map it will provide/display/serve

network topology information between devices such as physical/logical information,

traffic information, fault information, transportation information...

6.   Applicant argues that Carcerano does not teach or suggest generation and display of service-specific-views. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

7.   As a result, cited prior arts do disclose a system and method for controlling network elements and links, as broadly claimed by the Applicants. Applicants clearly have still failed to identify specific claim limitations that would define a clearly patentable distinction over prior art.

8.   Therefore, the examiner asserts that cited prior arts teach or suggest the subject matter broadly recited in independent claims 1 and 11. Claims 2-10, and 12-15 are also rejected at least by virtue of their dependency on independent claims and by other reasons set forth in the office action below. Accordingly, claims 1-15 are respectfully rejected.

Claim Rejections - 35 USC § 103

9.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A person shall be entitled to a patent unless –
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10.   Claims 1-10 are rejected under 35 U.S.C. 103(a) as obvious over **Kondo**

et al., (hereinafter Kondo) U.S. Patent No. **5,586,254**.

11.   As to claim 1, **Kondo** teaches the invention as claimed, including a

method of controlling a network which includes network elements connected via links,

and provides services, said method comprising the steps of:

creating view-configuration information based on network-configuration

information with respect to each of the services such that the view-configuration

information is related to the network-configuration information, said view-configuration

information providing a basis for a plurality of service-specific views of the network that

correspond to the respective services (col. 7 lines 34-col. 8 lines 39, col. 47 lines 63-

col. 48 lines 15. Figures 1c, 6a-c show the database of map information that provides a

basis for a plurality of service-specific views of the network that correspond to the

respective services); and

displaying selected one or more of the service-specific views by each view based

on the view-configuration information with respect to each of the services, said each

view including both or either one of physical network configuration of the network and a

logical network configuration of the network (col. 20 lines 3-59, col. 48 lines 16-22.

Figures 1c, 6a-c show users query database 300 to display selected one or more of the

service-specific views based on physical and logical network configuration).

It would have been obvious to one of ordinary skill in the Data Processing art at

the time of the invention was made that **Kondo** implicitly discloses the user enters the

searching for service-specific view of network configuration, the database 300 creates

service-specific view from plurality of service-specific view in the database 300 and

display on the display screen (see abstract, figures 1c, 4, 6a-c) equivalent to the step of

creating view-configuration information, said view-configuration information providing a

basis for a plurality of service-specific views of the network that correspond to the

respective services and displaying selected one or more of the service-specific views by

each view based on the view-configuration information with respect to each of the

services disclosed in the applicant's specification. A person of ordinary skill in the art

would have recognized that **Kondo** performs the same function in substantially the

same way to reach substantially the same result.

12.   As to claim 2, **Kondo** teaches the invention substantially as claimed,

wherein said step of creating includes the steps of:

selecting network elements and links from a network configuration represented

by the network configuration information (col. 7 lines 34-col. 8 lines 39, col. 34 lines 40-

60, col. 36 lines 34-65); and

creating the view-configuration information according to the selected network

elements and links (col. 5 lines 37-54, col. 36 lines 66-col. 38 lines 26).

13.   As to claim 3, **Kondo** teaches the invention substantially as claimed,

wherein said step of creating includes the steps of:

selecting a connection from a network configuration represented by the network-

configuration information (col. 7 lines 24-col. 8 lines 39); and

creating the view-configuration information according to the selected connection

(col. 7 lines 24-col. 8 lines 39, col. 23 lines 24-col. 24 lines 16).

14.   As to claim 4, **Kondo** teaches the invention substantially as claimed,

wherein said step of creating includes the steps of:

selecting ports of network elements from a network configuration represented by

the network configuration information (col. 6 lines 60-col. 7 lines 7 lines 23, col. 10 lines

21-49, col. 20 lines 33-col. 21 lines 47); and

creating the view-configuration information according to the selected ports (col.

20 lines 33-col. 21 lines 47).

15.   As to claim 5, **Kondo** teaches the invention substantially as claimed,

wherein said step of creating includes the steps of:

specifying attribute conditions of connections (figure 5s (1), col. 46 lines 10-20);

and

creating the view-configuration information by extracting network elements and

links relating to at least one connection that matches the specified attribute conditions

(figure 5s (1), col. 46 lines 10-26).

16.   As to claim 6, **Kondo** teaches the invention substantially as claimed,

wherein said step of creating includes the steps of:

specifying a service name (figure 9, col. 44 lines 25-col. 45 lines 4); and

creating the view-configuration information by extracting network elements and

links relating to connections that provide the specified service name (figure 5s (1), col.

46 lines 10-26).

17.   As to claim 7, **Kondo** teaches the invention substantially as claimed,

further comprising the steps of:

providing matches between failure levels and failure labels with respect to

different types of failures,   the failure levels indicating significance of failures either as

physical failures or as service failures (figures 1i-11I, abstract, col. 2 lines 39-col. 3 lines

59, col. 7 lines 34-64, col. 11 lines 54-62, col. 46 lines 53-62); and

displaying a failure level of a failure occurring in the network in association with

the displayed view (figure 5k(I), col. 2 lines 34-col. 3 lines 21, col. 7 lines 34-64).

18.   As to claim 8, **Kondo** teaches the invention substantially as claimed,

further comprising the steps of:

controlling the failures by a unit of a node or a port of a node (col. 11 lines 4-col.

12 lines 18, col. 18 lines 19-col. 20 lines 20); and

selecting a failure level of a connection by finding a largest failure level along the

connection, and displaying the failure level of the connection in association with the

displayed view (col. 20 lines 10-59, col. 22 lines 36-col. 23 lines 8, col. 32 lines 52-65).

19.   As to claim 9, **Kondo** teaches the invention substantially as claimed,

further comprising a step of selecting nodes and links on the displayed physical network

configuration to set a route between edges (col. 36 lines 66-col. 37 lines 14).

20.   As to claim 10, **Kondo** teaches the invention substantially as claimed,

wherein said step of selecting includes the steps of:

selecting the edges on the displayed physical network configuration (figures 5v

(7-8)); and

setting the route between the edges by extracting nodes and links so as to use

as small a number of intervening edges and links between the selected edges (col. 36

lines 66-col. 37 lines 14).

21.   Claims 11-13 are rejected under 35 U.S.C. § 103 (a) as being

unpatentable over **Kondo et al.,** (hereinafter Kondo) U.S. Patent No. **5,586,254**, in view

of **Carcerano et al.,** (hereinafter Carcerano) U.S. Patent No. **6,308,205**.

22.   As to claim 11, **Kondo** teaches the invention substantially as claimed,

including a system for controlling a network including network elements and links, said

system comprising:

a database which stores network-configuration information and view-

configuration information such that the view-configuration information is related to the

network-configuration information (col. 6 lines 60-col. 8 lines 39, col. 47 lines 54-col. 48

lines 15. Figures 1c, 6a-c show the database of map information 300 that provides a

basis for a plurality of service-specific views of the network that correspond to the

respective services);

collects information on configurations of the network elements and the links as

well as information on failures, and informs a change in at least one of the

configurations and the failures for a purpose of said updating (abstract, figure 5k(I), col.

2 lines 34-col. 3 lines 21, col. 7 lines 34-64); and

a client which displays both or either one of the physical network configuration

and the logical network configuration with respect to said client's own service by

selecting one of the service-specific views that corresponds to said client's own service

(col. 9 lines 66-col. 10 lines 4, col. 20 lines 3-59, col. 48 lines 16-22. Figures 1c, 6a-c

show users query database 300 to display selected one or more of the service-specific

views based on physical and logical network configuration).

However, **Kondo** does not explicitly teach a service-management server which

attends to registering and updating of the information stored in the database, and

defines views of a physical network configuration and a logical network configuration

with respect to each of the services based on the view configuration information stored

in said database. **Carcerano** teaches a service-management server which attends to

registering and updating of the information stored in the database, and defines views of

a physical network configuration and a logical network configuration with respect to

each of the services based on the view configuration information stored in said

database (abstract, figures 5, 9, col. 1 lines 60-col. 2 lines 61, col. 9 lines 15-col. 10

lines 24). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to combine the teachings of **Kondo and Carcerano** to have a service-management server to register and update the information stored in the database because it would have an efficient communication system that can collect, store and update the change status, configuration of devices in database.

23.   As to claim 12, **Kondo** teaches the invention substantially as claimed, wherein a failure-level-conversion table that provides matches between failure levels and failure labels with respect to different types of failures, the failure levels indicating significance of failures either as physical failures or as service failures (figures 1i-11l, abstract, col. 2 lines 39-col. 3 lines 59, col. 7 lines 34-64, col. 11 lines 54-62, col. 46 lines 53-62). However, **Kondo** does not explicitly teach network-management server. **Carcerano** teaches network-management server (figure 5). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to combine the teachings of **Kondo and Carcerano** to have a network-management server to have the same motivation as set forth in claim 11.

24.   As to claim 13, **Kondo** teaches the invention substantially as claimed, wherein said service-management server includes a connection-setting unit which controls settings of a connection between edges based on the edges, nodes, and links selected from the physical network configuration (figure 5v (7-8), col. 36 lines 66-col. 37 lines 14). However, **Kondo** does not explicitly teach service-management server in the

system. **Carcerano** teaches service-management server (figure 5). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to combine the teachings of **Kondo and Carcerano** to have a service-management server to have the same motivation as set forth in claim 11.

25.   Claims 14-15 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over **Kondo and Carcerano**, in view of **Harsham et al.** (hereinafter Harsham) U.S. Patent No. **6,041,347**.

26.   As to claim 14 and 15, **Condo and Carcerano** do not explicitly teach the invention as claimed; however, **Harsham** teaches wherein the view-configuration information is created such that network elements and links that are added during operation of the displayed services are added in real time to the selected one or more service-specific views (abstract, col. 3, lines 25-36, col. 7, lines 24-col. 8, lines 25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of **Condo, Carcerano and Harsham** to include the network elements and links that are added during operation of the displayed services are added in real time to the selected one or more service-specific views because it would provide an efficient computer network management system that has an ability to monitor in order to allow users to modify/add/delete and update network configurations or network topology via user interface.

Conclusion

27.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

28.   Grau et al. (USPN 6,067,093), Bowcutt et al. (USPN 6,308,328), Grau et

al. (USPN 5,910,803) are recited for disclosing various information related to the

claimed invention. Applicants are requested to consider these prior art references when

responding to this office action.

29.   Any inquiry concerning this communication or earlier communications from

the examiner should be directed to Thu Ha Nguyen, whose telephone number is (703)

305-7447. The examiner can normally be reached Monday through Friday from 8:00

AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Hosain T. Alam, can be reached at (703) 308-6662.

Any inquiry of a general nature of relating to the status of this application should

be directed to the Group receptionist whose telephone number is (703) 305-9600.

The fax number for art unit 2155 is (703) 872-9306.

Thu Ha Nguyen

August 31, 2004

HOSAIN ALAM
SUPERVISORY PATENT EXAMINER